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ABSTRACT

The purpose of this study was to choose an appropriate network provider for educational consultants and to develop and implement the network at Eurasia Educational Services (EES) using electronic mail (e-mail). The following eight steps were undertaken: literature review, scanning and selecting of provider criteria, decision-making, participant assessment, a workshop, mentoring, evaluation, and intra-organizational LISTSERV. The provider deemed AT&T EasyLink services most appropriate. The workshop, orientation materials, and mentoring process resulted in the initiation of a global network for EES using e-mail. Once a provider was determined, implementation among new users appeared possible with a single-event workshop, detailed orientation materials, and a mentoring arrangement. E-mail had a significant impact upon an international educational consulting agency with the most definitive difference being financial. The recommendations included publishing the summary tables of possible network providers, informing the parent organization of the impact of e-mail networking, and using workshop/mentoring (both for EES and client institutions in Eurasia) to initiate other technological tools. Questionnaires and a compendium of electronic resources are appended. (Contains 86 references.) (TMK)

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THE DEVELOPMENT AND IMPLEMENTATION OF A GLOBAL NETWORK FOR EURASIA EDUCATIONAL SERVICE USING ELECTRONIC MAIL

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A Practicum Report presented to Nova University in partial fulfillment of the requirements for the degree of Doctor of Education

Nova University

January, 1994

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Abstract of a Practicum Report
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Doctor of Education

THE DEVELOPMENT AND IMPLEMENTATION OF A GLOBAL NETWORK FOR EURASIA EDUCATIONAL SERVICE USING ELECTRONIC MAIL

by

Alan Algee

January, 1994

Eurasia Educational Services (EES) served a clientele in over 30 Eurasian countries without the advantage of a global network using electronic mail. Therefore, the broad purpose of this study was to (a) choose an appropriate network provider for educational consultants working in Eurasia, and (b) develop and implement the network at EES using e-mail.

Eight steps were attempted: (a) a literature review, (b) scanning and selection of provider criteria, (c) decision-making, (d) participant assessment, (e) a workshop, (f) mentoring, (g) evaluation, and (h) intra-organizational LISTSERV.

The provider deemed most appropriate was AT&T EasyLink services. The workshop, orientation materials, and mentoring process resulted in the initiation of a global network for EES using e-mail. An extensive evaluation was designed. The LISTSERV was deferred to future study.

Once a provider was determined, implementation among new users appeared possible with a single-event workshop together with detailed orientation materials and a mentoring arrangement. E-mail had a significant impact upon an international educational consulting agency with the most definitive difference being financial.

The recommendations included publishing the summary tables containing possible network providers, inform the parent organization of the impact of e-mail networking upon EES, and using workshop/mentoring (both for EES and client institutions in Eurasia) to initiate other technological tools.

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INTRODUCTION

Background and Significance

To meet the communication requirements for a vast geographical area, Eurasia Educational Services (EES) needed to implement an electronic global network. This organization consists of a team of educational consultants circulating in 30 European and Asian countries. The director believed that the educational agenda across Eurasia could be more expeditiously executed if modern approaches to global communication were installed.

In early 1993, the Director of EES conferred with the Technical Services Coordinator (TSC) of the international headquarters for the Assemblies of God Division of Foreign Missions and concluded, in concept, that electronic mail would significantly strengthen practitioners' effectiveness in the 1990's. Neither the director nor the TSC knew which configuration would be appropriate for educational consultants nor which training procedure would be effective in achieving usership among the staff. Therefore, the purpose of this practicum was to develop and implement a global network which would enhance the effectiveness of the educational consultants at EES.

The parent organization, the Division of Foreign Missions (DFM), administers the largest of all Protestant missionary organizations with 25 million adherents in 133 countries. Central to DFM philosophy and practice is the "training of national believers to proclaim the gospel to their own people in an expanding mission to other peoples" (Division of Foreign Missions [DFM], 1992, p. 1). Eurasia Education Service represents DFM in issues pertaining to ministerial training in Eurasia (Europe, Southern Asia, Commonwealth of Independent States [C.I.S], Middle East). Accordingly, Eurasia has 74 programs and seminaries now in place; EES has been charged by DFM to assist with raising that number to 200 by the year 2000. The staff at EES serve as educational consultants for existing and developing seminaries.

Particular issues treated by the consultants revolve around institutional effectiveness of the schools' expressed purpose and goals. Administrative problems often come into view. Developmental projects ranging from foundational documents to faculty in-service are typically coordinated through EES. Recently, EES has been involved in several educational research activities in response to the diverse

political, economic, cultural, and linguistic variables that characterize Eurasia.

The significance of the practicum to EES arose from the difficulty of communication together with the staffs' increased awareness of favorable alternatives. The Director believed that communication would become more essential in light of the future projects. Minutes from staff meetings reveal that the problem is both frustrating and perplexing. Consultants are scattered around the world and in constant circulation. Also, mail and facsimiles may not be found for several weeks. Long distance telephone connections are frequently impossible in such places as Eastern Europe and the C.I.S. Electronic mail is a newer tool which, if implemented, might result in a powerful new alternative.

A preliminary review of the literature revealed that implementation methods at other organizations were widely varied with no single approach being renown for particular success. Therefore, this practicum included a unique approach to implementation. Along with a workshop and training materials, an orientation-video was made and a mentoring arrangement provided as a post-workshop critical event.

The practicum was clearly related to topics examined in the History, Philosophy, and Practices of Adult Education seminar. The course stressed that history includes the future with all of its changing technology. One course text (Merriam & Cunningham, 1989) systematically explained how technology has always affected the practice of education. One assignment dealt specifically with global networks; no doubt remained that this technology is to become the core of educational administration, delivery, and resources. These, in short, form the infrastructure of adult education practice.

Research Questions

In this study, the basic research questions answered were: (a) Which commercial system, technical specifications, and procedures are feasible and available for EES to establish a global network; (b) how successful is a workshop, orientation material, and mentoring when implementing a global network?

Chapter 2

REVIEW OF THE LITERATURE

The climate of our times seems to have change as its best singular descriptor (Merriam & Cunningham, 1989). If so, then organizations such as EES must constantly identify its most critical expressions and conform strategically (Rothwell & Kazanas, 1989). The literature base of the present study supports the strategic approach by (a) projecting the prevalent rationale for e-mail established by similar organizations, (b) reviewing the technical issues which seem to be at stake, and (c) recognizing the various treatment options in solving the problem of implementation.

Global computer networking is rapidly becoming a critical tool across society with particular consequences for educational consultants (D'Souza, 1992; Miller, 1993). The reasons for this may be broadly identified as: (a) global forces spawning critical tasks; (b) the need for fluid teams; (c) organizational learning; (d) innovative structures; (e) hetarchical strategies; (f) information deficits; and (g) opportunism (Keays, 1993; Krol, 1992; Lynch & Rose, 1993; Manheim, 1993; Toffler, 1990.) Without question,

global networking will become a major avenue for social, intellectual, economic, and political growth (Harasim, 1993).

Many recent studies reveal that communication links using electronic mail achieves swift response, very low cost, easy archiving of messages, quick team-working, and increased accuracy (Brown, R., 1992; Cohen, 1992; Cummings, 1992; Glass, 1992; McGoon, 1992; Morentsen, 1992; Murphy, 1993; Robins, 1992). Consequently, Schnaidt (1992) identifies e-mail as the most frequently used networking tool. Raish (1993) supports this observation with specific measurements of data traffic across 52 nations.

By the end of 1993, Lotter (1992) expects 1.5 million computers actively linked to the public e-mail systems. The commercial vendors already report a growth rate of 30% per year (Miller, 1993). All of this is occurring while the Clinton Administration is aggressively pursuing a whole new educational infrastructure to allow electronic communication from virtually every corner of society (National Telecommunications and Information Administration, 1993). This agency, together with Vice President Al Gore, concludes that America should proceed at once to

a seamless network that will completely revolutionize the entire process of education in America.

Global networking with electronic mail has moved beyond the speculative stage to that of having a solid reputation and credibility. Boone (1992) studied the perceptions of chief executives of major corporations. She found that among those surveyed, e-mail was by far the most respected technological tool. Even in such sectors as the restaurant business, the church community, and health care, studies abound which show that e-mail has become a thoroughly recognized if not a critical means of communication in the global nineties (Gardner, 1993; Kasavana, 1992; Darling, 1992; Strahan, 1992).

For geographically dispersed work teams such as EES, both Perry (1992) and Horwitt (1992) show a number of salient features which prove invaluable. Chief among these are the unified transactions, economies of scale, and efficient transnational service.

In the adult education field, Merren (1992) reports that among educators at Pima Community College, e-mail was one of the most frequently utilized computer services. D'Souza (1992) explains this trend by citing the extensive usage and potential within all three

environments of academic settings: classroom, research, and administration.

Educational consultants can utilize a wide range of tools once the system is in place. Dietrich (1992) points out that distribution lists and bulletin boards solve a number of management problems. He adds that archived messages can be keyed with descriptors, set into a database, and retrieved whenever a problem similar to the one in the message is encountered. Beyond messaging, e-mail is a major purveyor of distance education processes (Fredrickson, 1992; Hawkins, 1992;) Of further interest to educators is the National Research and Education Network (NREN) which will eventually be used to transmit data at faster speeds. Tapping these resources requires some network capability through an appropriate e-mail vendor.

Another large consideration in setting up the system is determining which technological route to use. Electronic mail may be carried by a either public or private system. Both Latamore (1988) and Schnaidt (1992) predict that the number of users in private systems will far out-number those using public systems. Brown (1993) concludes that the private LAN-based

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systems are the more advantageous route although Stallings (1990) finds cost as the more frequent determinate. Both systems appear to have distinct advantages and disadvantages. Radosevich (1992) and Carroll (1992b) explain that the best of both worlds may be achieved by using a service which provides directory synchronization and gateways for many systems and users. Carroll (1992b), however, points out that comprehensive commercial service is quite expensive and concurs with Latamore (1992) that it is appropriate for larger organizations.

When a public system is to be used, Krol (1992) finds four important considerations in choosing from many alternatives: "(a) a clear identification of those with whom mail is to be exchanged; (b) the degree of tightness in the link; (c) the features desired in an interface; and (d) travel requirements" (p. 100). In short, the selection process should follow an assessment of the institutional needs.

Electronic mail is an emerging technology. As Raish (1993), states, "resources appear, mutate, merge, migrate, and disappear with impunity" (p. 1). Accordingly, some difficulties can arise such as finding an appropriate way to manage all of the varying

e-mail systems and messages (McCusker, 1993; Strehlo, 1992), security concerns (Glass, 1992), and a variety of threatening glitches (LaPlante, 1992). Brown, B. (1992) advocates professional and technical network management as a security solution to resolve many of the glitches--especially switching problems.

The future looks very bright for this technology and its application will dramatically effect how EES conducts much of its educational agenda in the future. As an example, an on-line chemistry conference held in summer 1993 (Borman, 1993) shows how air travel may have a very viable alternative in e-mail. The software for this and other features is becoming constantly more competitive and improved (Blum & Rowe, 1993; Gerber, 1993; Strehlo, 1993; Wilburn, 1993). The hardware also should undergo significant innovation in the next few years with such features as wireless e-mail (Churbuck, 1992; Coursey, 1992; Currid, 1993) and voice/fax integration (Hunse, 1992; Meier, 1992).

This technology must also be surveyed for its disadvantages and drawbacks. These range from such threats as security and privacy breaches (Braun, 1991) to technological decisions. As for the latter, connectivity between several different types of systems

(especially with large and/or wide area network designs) can be daunting. The solution according to Beattie (1992) and Merenbloom (1993) lay in host-based gateways. This software/hardware setup can be used to solve complex connectivity problems (in other words, "seamless integration") without compromising security.

Perry (1992) claims that e-mail communication may not help in group decision-making, may result in unintended nuance in keyboard comments, and can erode corporate hierarchies. As for the last problem, Rappaport (1992) sees e-mail as an effect of re-shaped hierarchies rather than contributing to its cause. Perry further worries about the absence of cues about age, gender, race, and appearance. However, an e-mail experiment by Nydahl (1992) led to the conclusion that users could achieve close and friendly relationships along with lively and well-informed discussion. It appears that most of the concerns revolve around cultural or organizational shifts and these, of course, may not come easy in every organization.

For all of its advantages, organizational-wide implementation can be a formidable task approached in a wide variety of ways (Doty, 1992; Doucette, 1992; Harrison, 1992; Korzeniowski, 1992; Travis, 1992).

Several studies led to the recommendation that institutions not wait until there is a grass-roots rally for e-mail, but rather the policy-makers should strategically and centrally proceed with implementation (Carroll, 1992a; Collis, Veen, and De Vries, 1993). All of these studies report that the pay-off potential would eventually be discovered throughout the organization.

The actual tools of implementation include the reams of print media, interactive networking, software tutorials (Brett, 1992), mentoring (Gregory, 1992), and workshops. Ironically, two studies show that the delivery of training could itself be achieved through telecommunication modes (Fleischman, 1993; Posner, 1993). Phenix (1992) concludes that workshops for librarians clearly resulted in the transference desired.

Raish (1993) conducted a workshop for neophytes of Binghamton University entitled "Stuff You Need to Know in Order to Navigate the Electronic Village". She found that this could be successfully used to teach adults how to use e-mail with consequent initiation into the network landscape. The present study contrasts with Raish insofar as the workshop was

limited to e-mail and did not include file transport protocol nor remote log-in. Raish introduced a wide use of the internet whereas the present study introduced only a single aspect.

No studies were found which specifically treated a mentoring process in implementing an e-mail network. A conceptual framework for mentoring is emerging in the literature although under various names such as cross-training and coaching (Burlew, 1991). This concept does seem to apply in a wide range of situations (from specific tasks to personal enhancement) among adult learners (Carden, 1990). Pedler, Burgoyne, and Boydell (1991) refine the concept by explaining the mentor as a role distinct from "the coach". They would describe the present study as having coaches rather than mentors since a problem is being explored together as opportunities are given to try new skills.

Whichever approach is taken, Robinson (1993) suggests that e-mail be phased in, that training sessions be kept brief, that all levels of users be included in the planning, that the idea be marketed among the users, and that care be taken in choosing an e-mail trainer. Simerly (1990) speculates that a workshop would be an appropriate solution for

organizations who need to initiate new procedures. Hildreth (1990) provides the platform for such an experiment by recommending ten-phases of professional meeting development. This study hinged upon just such an event.

Chapter 3

METHODOLOGY AND PROCEDURES

Procedures

The following eight procedures and sub-steps were sequentially utilized in this development research study. An overview of the progression is shown in Appendix A . For clarity, the first procedure listed in the proposal was broken down into procedure two and three below. The third procedure listed in the proposal was likewise broken down into procedure five and six below. In the interest of pursuing a rigorous research project beyond the scope of the proposal, an extensive evaluation phase was designed and appears as procedure seven below.

Step 1: Review Literature

In order to gather the most appropriate criteria needed in procedures two through seven below, a literature review was conducted. This literature review was also used to uncover solutions used by other organizations when faced with the implementation of a global network using e-mail through commercial providers.

The literature review was held to one year because (a) of the large amount of recent studies, and (b) the

field is changing so rapidly. The databases used for the search were Educational Resources Information Center (ERIC), DIALOG®, Information Retrieval Service, (IRS), and Sociological Abstracts. A number of descriptors containing "e-mail" and "global networking" were used in the search.

Step 2: Assess E-Mail Providers

After the results from procedure one were gathered (see Chapter 4, Step 1, for complete proof), the director for EES was presented with 12 criteria gathered therefrom. These were presented in mid-October both in writing and in person. Each criterion was discussed and the researcher verbalized some rationale for each one.

Upon the Director's clearance, these criteria were then used to compare up to 20 prominent e-mail providers. The purpose behind this step was to gather the information needed for the decision-making described in the next procedure.

Prior to the development of this procedure, the databases of the first procedure were once again scanned for any existing charts, tables, or documents which contained some (or hopefully all) of the same information. Since nothing seemed to exist, each

potential provider was directly contacted for information both by phone and by mail. The information gathered, therefore, was based upon the sales representative or the most current official publications from the provider.

Step 3: Select E-Mail Provider

In step two of the proposal, a report was to be given to the director explaining the resources available to EES and was to appear as an appendix in this practicum. The purpose was to provide enough data for decision-making. The comments of the practicum evaluator pointed to the need for more clarity and refinement than given in the proposal. Such amplification is provided below. Furthermore, this procedure was broken down into two phases and all of the results are reported in Chapter 4 rather than in an appendix.

First, a table containing the results from the second procedure was personally presented to the Director on November 15. The Director then convened his administrative assistant, the researcher and the TSC in order to: (a) review the results of procedure two; (b) select systems criteria which appear to be critical to the EES educational agenda; and (c)

facilitate a discussion which lead to a decision as to which e-mail system to use.

Second, before the final selection of a provider, the researcher and the TSC arranged for an operated-assisted telephone conference call to the Service Representative of the finalist. The purpose of this call was for (a) confirmation that the provider could indeed meet the needs at EES for a global network; (b) to identify, in detail, the features offered by that provider; and (c) to proceed with contract negotiation and account set-up.

Step 4: Assess Hardware/Software Needs And Participant Anxiety

In November, a questionnaire was constructed to document the staffs' hardware, software, e-mail familiarity, and anxiety toward e-mail (see Appendix B for complete proof). The construction respected the issues involved in questionnaire development as described by Boser and Clark (1990), Busche' (1993), De Vaus (1991), Fowler (1991), and Suskie (1992). The researcher compiled a check-sheet of 31 issues identified by the above authors. Each questionnaire item was passed through this check-sheet in order to strengthen the chance for a valid and reliable

instrument (see Appendix C for complete proof). Distribution was on December 1 via office-mail box and regular mail.

Step 5: Conduct A Workshop

Upon the director's authorization, a workshop was arranged. A letter of invitation (upon EES letterhead) and a subsequent reminder were mailed in the weeks prior to the workshop.

The extensive development of the workshop followed Hildreth's (1990) nine phases of professional meeting development (see Appendix D, Part I, for complete proof). Since some anxiety level was indicated by procedure four, the workshop was adjusted to ease this tension as much as possible. Some examples included: (a) a creative name, (b) Christmas refreshments, (c) friendly mentors, and (d) anecdotes to show that this technology could be both user friendly and valuable.

A comprehensive orientation manual was written. The researcher together with the TSC planned for a manual that would highlight the points needed by new users of e-mail. Each page was intended to also be an overhead visual. The researcher acted as an educational consultant and applied his expertise in creating frames for adult learners. The TSC acted as a

technical consultant and edited the frames for comprehensiveness and accuracy.

At 2:00 p.m., December 11, the workshop was convened at 1641 Boonville Ave, Springfield, MO. This was the conference center for the Eurasia department of the DFM. The researcher served as the workshop coordinator and training consultant; the TSC served as the technical consultant.

The entire meeting was video-recorded by a media consultant from the Media Center of the Assemblies of God. A high speed Sony television camera was used which could capture the activity displayed on the computer monitor. The video was intended (a) for review, (b) for possible use by absentees, (c) to assess presentation skills, and (d) for possible use in a learning module/package for those overseas.

The EES staff was invited, but not required, to attend. In addition, some staff from the international headquarters who often interface with the educational consultants were invited. Except for the Director of EES, the participants were not advised that the workshop was also used as a practicum for submission to Nova University.

Several computers were available and a projection panel was connected so that an e-mail demonstration could be conducted for the entire group using an overhead projector. Ample opportunity for discussion, questions, and practice was provided.

Step 6: Arrange for Mentors/Protégés

Those who could qualify as e-mail mentors were identified prior to the workshop and then contacted to secure their willingness to serve. To qualify, the potential mentor only needed to be a proficient e-mail user (based on reputation) and be willing to help them with all phases of implementation including hardware/software/account setup. The pool of mentors was established by the researcher. The mentor did not necessarily need to be a part of the EES team.

As "mentoring arrangement" was approached in the workshop agenda, a poster-size chart was revealed (see p. 26 of supplementary volume for a reduced view). Those who wanted a coach were invited to raise their hands whereupon a particular coach was offered and, upon user's acceptance, the relationship established. This arrangement was immediately recognized by writing the names with colored markers onto the poster.

Step 7: Evaluate Workshop and Mentoring

In order to eventually achieve validation of the effects and/or the worth of training, the following three sub-steps were designed and sub-steps one and three were conducted. These combine into a level four evaluation (Kirkpatrick, 1960) which reveals the consequences of the program if transference actually occurs. Subjective measurements of soft data together with objective measurements of hard data were attempted (Phillips, 1984). The value-added aspect provides a more proactive or strategic approach (Rothwell & Kazanas, 1989) which is particularly needed if the real impact of training is believed to lie elusively in the future.

1. Participant Evaluation. The participants rated the workshop using Simerly's (1990) Workshop Evaluation Form (see Appendix E for complete proof). It was assumed that this rather simple instrument was sufficiently reliable and valid for this study. The assumption was based on the credibility of Simerly as a a professional development expert and the integrity of publication by Jossey-Bass (1990).

The rating forms were distributed at the beginning of the workshop. The participants were then free to consider the indicators during the workshop. A table

was provided at the door with a labeled basket for the rating form. The statistical treatment was with Microsoft Excel 4.0.

2: Change in E-mail Usership. The measurement of change occurring for at least 90 days after the workshop was designed with two approaches. First, the researcher constructed a follow-up questionnaire (see Appendix F for complete proof). The questionnaire was designed for eventual transmission via e-mail to workshop participants with a "receipt" feature selected so that the researcher would know who actually received the questionnaire.

During instrument construction, the issues listed in Appendix C were respected in exactly the same manner as described in procedure four of this report.

The second method selected to measure change in usership was to monitor each consultant's e-mail usership by recording the number of messages for 90 days before and 90 days after the workshop. Data was sought from the DFM accounting department where detailed usage statistics might be obtained. Once measured, quantitative analysis would be appropriate since the raw data would be ordinal. From this, any statistically significant difference in e-mail traffic

could be detected. Conclusions about the program's efficacy might therefore be drawn.

3. Value-Added Analysis. In order to see what financial impact the intervention could have upon the department (Phillips, 1984), the cost differential of re-directed message traffic was determined. A comparison was made for sending messages (via postage, e-mail, fax, and phone) from four typical countries where EES is active (Austria, Russia, Belgium, and France). In order to achieve the comparison, the four countries were averaged together since telephone costs vary among countries.

The carrier chosen for purposes of computation was AT&T and the cost posted was based on the rate in effect on December 18, 1993. Since message traffic will vary widely among users, computations were made for five, ten, fifteen, and twenty messages. A fax call was assumed to (a) require a three-minute charge, and (b) require only one attempt. A telephone call was assumed to have required a ten-minute charge in order to compensate for introduction, small-talk, and on-hold moments. No local telephone charges were added for e-mail messages since these are often made at no additional cost. In summation, the calculations were

made for ideal conditions. The point was to display some comparative scenarios so that both the leadership and the users could see cost differentials for alternative ways of communication (or global networking).

8. Intra-organizational Discussion List

This component was listed in the original proposal as a procedural step in the study. After further counsel with the practicum evaluator and the cluster coordinator, this project was deferred to a later study. This action was in conformity to communication between the researcher and the practicum evaluator on October 11, 16, & 19 (copies are included with this report). Further rationale for this action is reported in Chapter 4.

Definitions

In this study, global network means that a consultant can transfer data from anywhere on the Earth through a modem via a commercial platform. Both provider and platform point to a commercial vendor of electronic communication via the internet.

Consultant, when used in connection with EES, means a practitioner who is under contract with Eurasia Educational Services. Eurasia is organizationally

defined by DFM as Europe, the C.I.S., Southern Asia, the Middle East, and North Africa.

Coaching and mentoring are sometimes used interchangeably in this report. All other terms are either given amplification as they are discussed or else follow conventional usage.

Assumptions

The assumptions utilized in this developmental research project were:

1. The research problem accurately described the situation faced by EES.

2. The hardware and software resources were available to each educational consultant through EES institutional approval.

3. The new users had sufficient cognitive, affective, and psychomotor altitudes to achieve e-mail proficiency.

4. Usership could not be suddenly achieved after a single-event workshop. Therefore, some after-training critical event(s), such as mentoring, was indicated in order to achieve the objectives.

5. A 31-point check sheet specifically developed for this practicum (see Appendix C for complete proof) provided sufficient attention to validation and

reliability. More rigorous validation procedures were not required because (a) most of the items were simply gathering technical or factual data (distinctly closed-ended), (b) the questionnaires were not the central nor crucial product of this practicum, (c) the check-sheet was developed from prominent survey scientists and is therefore considered comprehensive, and (d) during Nova's practicum workshop, it was explained that rigorous validation generally constitutes a separate practicum.

Where other minor assumptions were used, an explanation was included along with the description of the procedure involved.

Limitations

This development study contains an evaluation component, but does not consist of strict evaluation research. Such a study would exceed the parameters indicated by developmental methodology. The researcher furthermore acknowledges his bias toward a favorable outcome of the procedures; the evaluation and possibly the conclusions, therefore, may be limited by such bias.

It is difficult to ascertain exactly what might cause the successful implementation of a global

network. It may be the workshop, the mentoring, the talent of the researcher, the vision and energy of the leadership, increased necessity, some other factor, or some mixture of any (or all) of the above. These variables were not controlled and therefore the conclusions must apply to the process in a general way rather than to any specific variable.

The participant ratings may not be a valid indicator for evaluating the worth of the workshop. Brookfield (1986) finds that insights from such an endeavor may not surface until the learner actually confronts frustration, ambiguity, or challenge. At such a juncture, adults often recall a valuable solution which was not appreciated when first encountered.

This study does not have a clear-cut threshold indicating success. If e-mail is implemented and if usership increased, it follows that usership will increase even more in the time to come. There is no definitive indicator (traffic count, dollars saved, etc.) which demarcates success, or failure, in this study.

The most important features of an e-mail platform (for example flattened time and distance barriers,

security, dependability, convenience, etc.) are difficult to measure and doing so would exceed the parameters of this developmental research.

Chapter 4

RESULTS

Step 1: The Literature Review

Seventy-four citations were selected as being particularly relevant to the problem faced by EES. As the studies were further scanned, 12 criteria appeared across the literature which seemed to be of particular concern to educational consultants who were selecting a commercial e-mail provider (Brown, R., 1992; Cohen, 1992; Cummings, 1992; D'Souza, 1992; Darling, 1992; Gardner, 1993; Glass, 1992; Kasavana, 1992; McGoon, 1992; Miller, 1993; Morentsen, 1992; Murphy, 1993; Robins, 1992; Strahan, 1992).

No one document provided all of the variables but several (such as cost and connectivity) appeared across most documents. The criteria were enumerated and eventually appeared as the fields of step 2. Further treatment of the remaining issues discovered in the literature review were considered in Chapter 2 of this report:

1. Cost Per Mo.
2. Message Costs (15Kb)
3. Cost to Connect
4. Cost of Software

5. Windows, DOS
6. Phone for Questions
7. FTP
8. Telnet
9. Max bps
10. Access Via
11. Info Srvcs
12. Number of countries served

Several methods of implementing e-mail were found and are carefully reported in Chapter 2. The term mentor was used in the development of this report, but according to Pedler, Burgoyne, and Boydell (1991), coaching would probably be more appropriate. This term was indeed used during some communication with the workshop participants.

Step 2: Assessment of E-Mail Providers

After searching for the more prominent vendors, sixteen major contenders for providing global networking to such agencies as EES were considered. All of these provided the data needed to address the 12 criteria and were then compared in Table 1 and Table 2. The results fit easily into these comparative tables which were constructed in order to provide a quick overview of the global network providers.

The tables were held on file for further treatment in procedure three of the study. Most providers offered windows version, similar baud rates, and some type of information service. Greater diversity appeared in costs, internet access, and access route.

Table 1

Cost Comparison of E-Mail Providers (October 15, 1993)

	Cost Per Mo.	Message Costs (15Kb)	Cost to Connect	Cost of Software
AT&T	$3	.50	0	$220
Prodigy	14.95	.05	0	0
CompuServe	8.95	60 free; $.15	depends	$40
AmericaOnline	9.95	free	5 hrs free; $3.50/hr	free
GEnie	8.95	0	4hrs free; $3- $9/hr	0
Delphi	10.00	0	4hrs free; $4/hr	0
TheWell	15.00	0	$6/hr	0

Ziff Net		$20/hr			
BIX		$13	0	$3 to $9 per hr	$18
MCI Mail		$3	.60	0	0
Advantis		$53	.50	0	$203
BT N.America		$100	.80	0	$25
Sprintmail		$20	.10	$7 to $14/hr	$15
Pacific Bell		$5	.30	0	$5
The World	1.50		0	20hr free,$1/mi	0
PSI	$2		0	0	$19

Table 2

Service Comparisons for E-mail Providers (October 15, 1993)

	Win-dows?	Phone for Questions	FTP	Tel-net	Max bps	Access Via	Info Srvcs	Cntrys Served
AT&T	Yes	8002255288	N	N	9600	800 USA; loc Intl	Yes	Most, if arranged
Prodigy	Yes	8007763449	No	No	9600	local access prodigy only	Yes	USA only
CompuServe	Yes	8008488199 In-country #	No	No	No	Various	Yes	All but hostile
AmericaOnline	Yes	8008276364	Yes	Yes	9600	Sprint; Tymt USA only	Yes	USA only
GEnie	Yes	8006389636	No	No	9600	multiple	Yes	Most, if arranged
Delphi	Yes	8006954003	Yes	Yes	9600	Sprint; Tymt	Yes	Most, if arranged

TheWell	Yes	4153324335	Yes	Yes	9600	CompuServe	Yes	Most
Ziff Net		8006660330	No		9600		Yes	
BIX	Yes	8006954775	Yes	Yes	9600	Sprint, Tymnet, Dirct	Yes	Most
MCI Mail	Yes	8004446345	No	No	9600	800 USA; access Intl	Yes	Most
Advantis	Yes	8002845849	Yes	Yes	9600	800 USA	No	Most
BT N.Amer	No	8008727654	No	No	9600	Tymnet	No	Most
Sprintmail	Yes	8007361130	Yes	Yes	9600	Sprint	No	Most
Pacific Bell	No	8004236245	No	No	2400	Direct	No	CA only; use gate
The World	N/A	8003487529	Yes	Yes	9600	Direct Dial	No	only US
PSI	Yes	8008277482	Yes	Yes	14.4	Mass Direct Dial	Yes	Many

Step 3: Selection of an E-Mail Provider

On November 1, the Director received, with appreciation, Table 1 and Table 2. These tables are more appropriately shown in this chapter rather than an appendix as indicated in the proposal. The Director felt that the tables provided an abundance of data which needed more filtering prior to decision-making. He therefore returned the tables to the researcher and the TSC for further analysis. He asked that they present him with their final recommendation for an e-mail provider based on the criteria explored. The researcher and the TSC considered the 12 criteria and arrived at four main criteria used in forming a final recommendation:

1. Provides technical assistance within Eurasia
2. Has a sound connectivity protocol
3. The price is feasible
4. Is recognized for global access

These led to a recommendation of AT&T Easylink Services. Before presenting the final recommendation to the director, the researcher and the TSC arranged for a conference call at 10:00 a.m. on November 23 with Mr. Dale White, the AT&T Area Representative based in St. Louis, MO. The purpose of this call was to confirm

that the following valuable features were indeed obtainable from AT&T Easylink and readily available to educational consultants working in Eurasia:

1. Simplified Directory Structures
2. Quality & Speed Of Output
3. Worldwide Technical Help And Support
4. Information Services Options
5. Flexible & Centralized Billing
6. Wide Menu Of Delivery Options
7. Electronic Forms Provision
8. Reputation as to Number Of Users & Messages
9. Broadcasting Capability
10. Known For Global Presence And Connectivity Protocol
11. Toolkit Array
12. Width Of Technological Platform
13. All Services In 1 Session
14. A Legacy Of Quality
15. Optimal Use Of Existing Systems
16. Critical Mass Of Global Network Resources
17. No Hidden Training Costs
18. Sender Pays For Messages - No Charge To Read Mail
19. Transparency To End-Users

20. Optional Detailed Usage Statistics
21. Selective Downloading
22. Mailtalk, Telex, & Fax Receive Features
23. Binary File Transfer
24. Competitively Priced
25. Logos/Signatures
26. Toll-Free Access From Anywhere In The USA
27. Simplified Format
28. Research & Database Features

After the Director considered the above features, he designated AT&T Easylink to be the official global-network provider through which the staff could exchange e-mail documents for both external and internal communication. A corporate account and centralized billing mechanism was obtained from AT&T EasyLink through the accounting department of the parent organization, the International Headquarters of the Division of Foreign Missions in Springfield, MO.

Step 4: Needs and Anxiety Assessment

The instrument was constructed as planned (see Appendix B for complete proof). It returned data that could be used to more carefully prepare for the training event and hence the implementation of the global network. One hundred percent of the

inventories were returned and entered into a table (see Table 3).

Table 3

Summary Table for Pre-Workshop Questionnaire (December 1, 1993)

	Modem Bd	Software	Access Via	Inter-net	Inter-est	Active User?	AED-NET	Internet Address
Karen	14.4	ATT/Win	Easylink	No	High	No	No	aalgee@attmail.com
Alan	14.4	ATT/Win	Easylink	Nova	High	Yes	Yes	kalgee@attmail.com
PaulW.	9600	ATT	Yes	No	High	Yes	No	woodpaul1@attmail.com
Dene	14.4	ATT	ATT	Nova	High	No	No	woodpaul2@attmail.com
Duane	9600	ATT	ATT	No	High	Yes	No	wdcollins@attmail.com
Norm	No	No	N/A	No	High	No	No	
Dale	2400	AOL	AOL	Yes	High	Yes	No	
Paul P	9600	AT&T	ATT	No	High	No	No	pparks@attmail.com
John	2400	ATT	ATT	No	High	No	No	jsiebold@attmail.com
Ron	No	No	None	No	unsure	No	No	
Cheri	14.4	no	None	No	unsure	No	No	

Roland	9600	ATT	None	No	unsure	Yes	No
Sandy	14.4	no	None	No	unsure	No	No

Just prior to the workshop, five members of the EES team (38%) claimed to be active users of e-mail. Nine (69%) of the thirteen team members had software. Only two (15%) did not have a modem. Nine (69%) said they had a "high interest" in learning e-mail with the others reporting that they were "unsure" about learning this new technology.

The table shows eight (62%) have proceeded to an AT&T account. Most AT&T accounts were opened only weeks before the workshop as a result of the discussion and generally known information that EES had selected AT&T as the provider for the global network.

The table was given to the director of EES. He preferred to personally handle further contact with those who lacked software or hardware. He explained that he would not only authorize the acquisitions, but would urge all members of the team proceed with usage of this equipment.

One item on the questionnaire specifically polled for the level of anxiety that might be present among the staff. The results were displayed in a separate table (see Table 4).

Table 4

Attitude Toward E-mail Based on Questionnaire 1

Item Selected	Percent of total
I just do not know enough	40%
I am afraid of e-mail	0%
E-mail is frustrating	10%
I think e-mail is valuable	80%
I use e-mail without much stress or anxiety	40%

Step 5: The Workshop

The workshop was entitled, "How to Send Smoke Signals on a Rainy Day" and convened as planned. Extensive preparations for the workshop were documented at each phase (see Appendix D, Part II, for complete proof). Eleven participants were present.

A 40 page orientation manual was rigorously researched and prepared by the researcher. It is submitted along with this report as a supplementary volume. The meeting agenda appearing in Appendix D was successfully followed. The mood was hearty in spite of the fact that the workshop required the participants to forego a Saturday afternoon during the Christmas shopping season.

Most of the orientation materials were set into Powerpoint frames and presented as a computerized slide show by the refreshment table in the conference room. The entire proceedings lasted about four hours. Three participants came early with technical questions about configuring e-mail software for their laptops.

The discussion flowed easily among the participants and the presenter. The e-mail demonstration was quite smooth except that the

computer's projection panel tended to become light after long exposure to heat.

Several pieces of hardware (pocket modems, jacks, etc.) were put on display as well as various manuals. Beyond e-mail, the participants expressed interest in Powerpoint, the application used to produce the slide-show and the orientation manual. They also were interested in the projection panel and at break time entered an enthusiastic discussion as to how they could use this in classrooms or in presentations.

Within a few weeks of the workshop, DFM asked if they could purchase the copyrighted materials from the researcher who had already copyrighted them under the name of EES. Both the researcher and EES agreed to the transaction and all of the materials were thus transferred to DFM. The DFM wants them for use with all 1200 overseas personnel, not just EES.

Step 6: The Mentor/Protégé Arrangement

The mentoring arrangement proceeded exactly as described in the procedures. Nine participants indicated a desire for a mentor and were thus written into the chart along with a coach.

Step 7: Evaluation of Workshop and Mentoring

1. Participant Rating.

All participants returned the rating form. The mean score placed the workshop in the second quintile ("good") for all points evaluated with Simberly's (1990) scale. The narrow SD indicated uniformity in the evaluations.

Upon tabulation of the results, item 4 was difficult to interpret. It indicated no direction and therefore the assumption pertaining to the questionnaire (see procedure 7, Chapter 3) was faulty.

Table 5

Scores Issued by Participants

How well did the session:	M	SD	Scale
1. achieve its stated goal?	4.9	.30	good
2. introduce you to new ideas?	4.4	.67	good
3. provide info relevant to job?	4.6	.50	good
4. meet your level of understanding?	4.2	1.25	good
5. provide opportunity for question/discussion?	4.7	.65	good

Additional Comments

1. You should have chosen a time besides Saturday PM in December, for your presentation.
2. You have assumed we all have a basic knowledge of your subject; I do not believe that is true.
3. This program, was it instigated by you, or EES, or the field office? Your approach should have been through the field office, and held during the regular work week.
4. Very fine presentation with helpful material.

5. The establishing of the mentoring network will be especially helpful in getting our personnel up and running. Thanks.
6. Excellent presentation.
7. Excellent presentation.
8. Very well done workshop. Explained & demonstrated well to beginning e-mail users; new tips & ideas for current users.
9. Good demonstration. Thank you.

N = 10

2. Change in E-mail Usership

During questionnaire design, the purpose became more succinct. The instrument returns specific information revealing whether or not (a) participants were using e-mail, (b) mentoring was actually utilized and to what extent, (c) mentoring was viewed as a valuable experience, and (d) any problems were occurring. The questionnaire was revised three times using the criteria of Appendix C.

The researcher planned to attach a valuable follow-up document to the questionnaire which will contain a compendium of electronic resources for adult educators (see Appendix G for complete proof). This resource will be shared to raise participants' interest in the further potential at their disposal. Perhaps they would also return the questionnaire in appreciation for receiving such a resource.

An indicator was included in the questionnaire to reveal whether or not the participant proceeded with a subscription to Adult Education Network (AEDNET). Such a subscription was promoted during the workshop as a particularly relevant scholarly list for educational consultants interested in the issues of adult learning (see p. 25 of supplementary volume).

The second approach of establishing a platform for a quantitative analysis was not readily achievable for the following reasons:

1. The billing for AT&T Easylink is handled through the headquarters' central billing department. They would not release detailed account information for the users because of possible privacy violations. The suggestion that a random number be assigned to the subjects required detailed work on their part. They expressed clear reluctance to become involved in this way especially as they were already overloaded with trying to close the 1993 accounting cycle.

2. Prior to the workshop, the participants were not asked to tally any e-mail traffic because it was assumed that traffic was very light. The weak amount of traffic was the very reason for the study. During the workshop, participants were asked to make such a tally but the effort was not taken seriously and therefore reliable data was not obtained.

3. A simple message-count would be seriously skewed and inaccurate based on such factors as a subscription to AEDNET. For subscribers, there would instantly be many "in" messages which would generate traffic, but not reveal the type of usership which was

under study. Therefore, messages would have to be analyzed which would require another set of procedures.

4. For those who were first time users, a message count at 30 days after the workshop would not be accurate since some learners would require various lengths of incubation. Some would have to wait for some weeks just to get the modem and software installed.

It was determined that commitment to additional study is required in order to provide a quantitative analysis to explore the impact of e-mail using factors such as the workshop and traffic counts. Such inquiry was deferred to evaluation research whereas the present project was limited to developmental research. Since a quantitative approach was attempted, the process is nonetheless described in this report even though it could not be conducted as hoped.

3. Value-Added Analysis.

Although the quantitative procedure failed, a qualitative approach was achieved to estimate the financial impact of e-mail and, by implication, of the training intervention. The results of this inquiry appear in Figure 1 and Figure 2. Various scenarios are represented by the number of messages sent and their

cumulative costs. The greatest financial impact was the in use of e-mail place of the telephone and the weakest impact was using postage in place of e-mail.

Figure 1. Cumulative-cost comparison between e-mail, fax, phone, and postage.

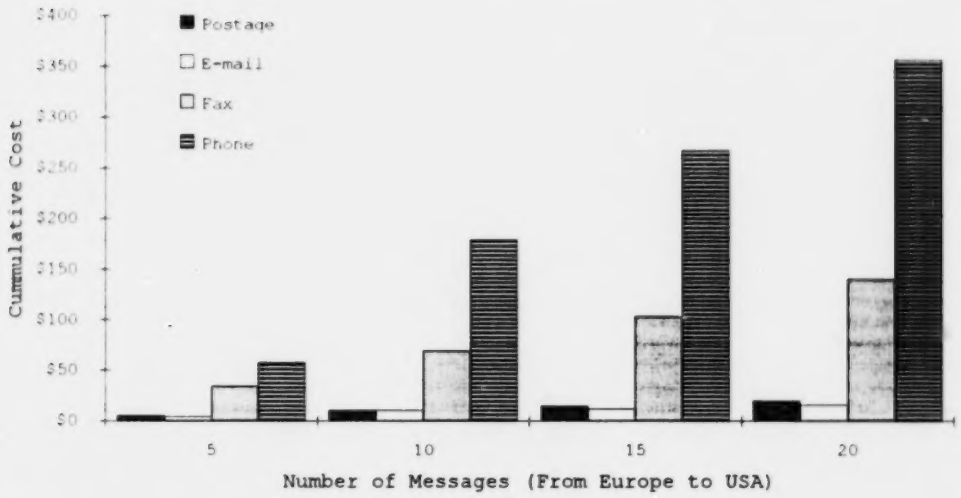
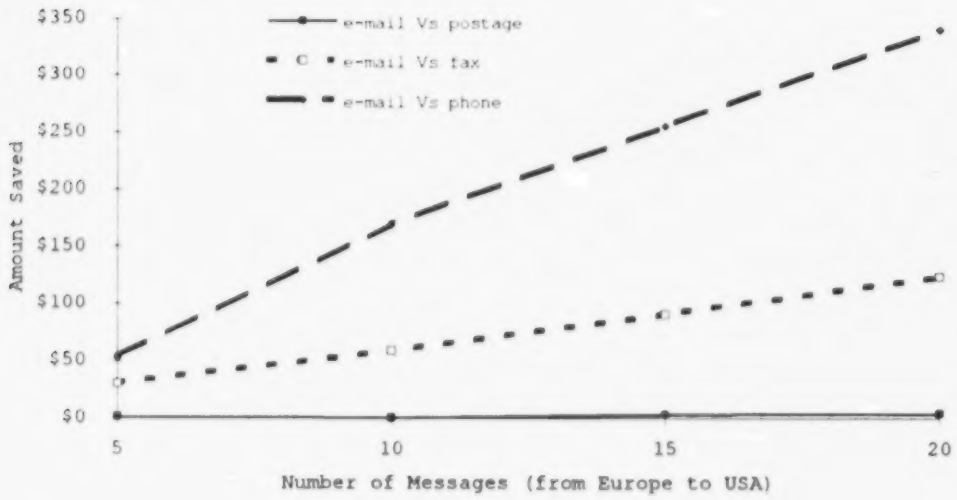


Figure 2. Amount saved as messages are re-directed from postage, fax, and phone to e-mail.



Step 8: Intra-organizational discussion list

As explained in the accompanying correspondence between the researcher and the practicum evaluator and in consultation with the cluster coordinator, this step might have led to a good product. It did not, however, maintain the research character becoming to doctoral study. This procedure, therefore, was deferred to later study when specific attention could be given to all aspects of rigorous applied research. This action also allowed more time and effort for strengthening the other procedures so that better inquiry into the actual research questions could be achieved.

In spite of the deferral, the Director and researcher brainstormed about the potential of such a project. A few sample acronyms were mentioned which, at an appropriate time, could be used for the project. The acronyms (EASEL and EARL) were discussed in the workshop and appear on page 18 in the orientation material (see the supplementary volume of this report).

Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Discussion

In order to begin implementation of a global network for EES using a commercially provided e-mail platform, research was required to find the most appropriate vendor. The literature review helped to find the criteria that would seem to be of greatest concern. Once determined, the department was brought a step closer to decision-making and, hence, realization of this new technology.

It was surprising that the recent literature did not already contain a table of comparative data for some or all of the 12 criteria. Such criteria would be of concern to many agencies besides EES. Some reports may exist in the literature prior to October 1992, but it would not be useful since such data changes very rapidly. Accordingly, it was incumbent upon the researcher to date Table 1 and Table 2.

The criteria which were eventually applied for selecting a provider were similar to those recommended by Perry (1992) and Horwitt (1992). The main difference was that within the present study, more care

was given to comparing cost (both among providers and the alternative methods of communication) and the reliability of technical assistance across the various countries of Eurasia.

Once the Director examined the data, he followed the approach taken by Carroll (1992a) and Collis, Veen, and De Vries (1993). That is, implementation was strategically and centrally initiated rather than waiting for a grass-roots call for the technology.

Identifying the hardware and software needs of potential users was rather pragmatic. The affective issues such as anxiety level and interest probably should not have made a big difference in the workshop. After all, anxiety should always be reduced (Knowles, 1980) among adult learners. Robinson (1993) also emphasizes this point when discussing the implementation of a network among new users. If most of the participants were indeed new users, perhaps it could have been assumed that every effort should be given to reduce anxiety in a learning climate. Such an assumption would have rendered the affective indicators in the questionnaire unnecessary.

The workshop was designed with Robinson's (1993) concern that care be taken in choosing an e-mail

trainer. To address this, the "trainer" was vested in two individuals: a training consultant and a technical consultant.

The workshop was experimental and therefore time from the regular workweek was not sought. It was not known if such a workshop could actually lead to usership. In addition, some of the educational consultants are currently serving as pro tem seminary professors which further precluded regular working hours. To be sure, securing an ideal time for such a workshop is almost impossible.

It is important to recognize that developing the workshop was done in phases, not steps. Hildereth (1990) therefore suggests that these need not be strictly sequential and that the depth with which these phases are treated will vary according to the need. The description of the phases (see Appendix D for complete proof) sometimes referenced various aspects of the practicum and it is noteworthy that developing a professional meeting is not unlike some of the process used in developing a practicum.

Much of the depth of each phase would simply depend upon the judgment of the one responsible for developing the meeting or, in this case, the workshop.

In reality, therefore, evaluating the effectiveness of a workshop might really be evaluating the effectiveness of the individual(s) behind it.

If the participant rating is to be believed, then the results tend to corroborate Phenix's (1992) and Raish's (1993) conclusion that an e-mail workshop can be a positive event leading to usership of communication by e-mail.

Simerly's (1990) evaluation form was chosen because of the publisher's credibility and Simerly's integrity as a workshop expert. Nevertheless, the one item on which the participants issued their weakest rating was "did the workshop meet your level of understanding?" It was completely unclear to the researcher if low marks meant that the workshop was geared too low or too high for the participant. This was a crucial question and the researcher was surprised that an instrument published by Jossey-Bass would allow an indicator which gives no direction. The researcher assumes responsibility for failing to see this ambiguity in the process of instrument selection. These oversights support the need to carefully audit questionnaire items against such tools as the 31-point check sheet compiled from Boser and Clark (1990),

Busche' (1993), De Vaus (1991), Fowler (1991), and Suskie (1992),(see Appendix C for complete proof).

Evaluating the implementation process was to have been done using both qualitative and quantitative analysis in order to reach for a level four evaluation. The errors in the particular quantitative approach were not fully appreciated until after the practicum was underway. The practicum process made clear that research of this nature needs to carefully anticipate the availability of data sought. The researcher felt quite alarmed by the flaws in the original intention to measure the results with quantitative technique.

Approaching evaluation from a value-added vantage could be tied to the impact of e-mail, the impact of training, or the impact of both. If transference occurred because of a training event, then training might be seen as being quite cost-effective--depending on the results. To make this determination, a more complex experimental design would be required so that the appropriate dependent variables could be isolated and thence measured. Certainly the population of the present study is too small for such an undertaking.

A major thread of this practicum was the mentoring process. Similar, if not alternative, terms appearing

in the literature are "cross training" and "coaching". This component of the study was an after-training critical event. Failure here could have meant that e-mail would not have been implemented and thus rendering the study (including the workshop) a failure. This scenario is based on the obvious assumption that a single afternoon workshop cannot result in sudden usership. For this reason, the mentoring processes was carefully monitored and esteemed by the researcher and the Director.

The workshop design and the mentoring process were both done in the much-talked-about just enough, just in time approach to training. In this spirit, the processes were guarded for unnecessary expansion into such areas as file transport protocol and remote log-in.

Finally, the researcher observed that e-mail implementation began to build a certain momentum at EES. This was evidenced by the fact that quite quickly after the Director authorized AT&T to be the platform provider, several staff proceeded at once with acquiring the hardware and software--even before the workshop. This was a welcomed dynamic because more participants were better prepared for the workshop.

Conclusions

This development research study led to the conclusion that an appropriate provider for a international global network serving educational consultants can be ascertained if an agency's criteria are clearly identified. Once selected, implementation among new users is achievable with a single-event workshop together with detailed orientation materials and a mentoring arrangement.

The implementation of e-mail does have a significant impact upon an international educational consulting agency with the most definitive difference being financial. Although other effects (convenience, security, etc.) are clear, their impact are more difficult to quantify.

Implications

Choosing a global network provider can be a rather slippery prospect because the criteria sometimes have varying importance. The technology is changing so rapidly that the limitations noted for one provider today may not exist tomorrow. Where change is so rampant in the technological circle, decisions must be made without the satisfaction of knowing that the rationale will long endure.

If technology changes quickly, the process of human learning does not. A training event, if it respects the well-known principles of adult learning and is well-organized and carefully developed, can be useful in keeping educational consultants abreast in many of the innovations that are expected in the years to come.

The implementation of e-mail at EES will, over time, mean an enormous financial savings. Perhaps the more significant effects of flattening the barriers of space and time are really the basis of implementing this project--even if the consequences are speculative at this point. There is no doubt that the overall impact of using an e-mail network for EES will expand. The method of communication will change and, along with it, efficiency. The increase in potential for educational consultants to accomplish more work and research for their international constituency seems quite astounding.

Recommendations

The researcher offers the following recommendations based on the process of this study:

1. The information displayed in Table 1 and Table 2, together with an accompanying discussion, should be

submitted for publication for the benefit of others who likewise seek information concerning appropriate providers of a global network.

2. The financial impact of using e-mail for international communication, as displayed in Figure 1 and Figure 2, should be reported to the budget committee of DFM. This will begin to disseminate the value-added data throughout the various organizational strata.

3. The Director should arrange on-going workshops for curing other gaps in knowledge--especially those in the universe of emerging technology. Perhaps one day each quarter can be devoted to in-service. The Director should indicate his commitment to such a process. When training events are convened, it is important to provide both a technological consultant as well as a training consultant to assure that the event has the maximum chance of success. At such events, mentoring or cross-training should be facilitated whenever possible.

4. Some likely areas which should be considered for implementation among educational consultants is FTP and remote logon using the internet. If the director implemented these along with e-mail, educational

consultants would have vast new worlds of information, data, and resources available to them as they are called upon to treat educational issues.

5. The Director should work with the DFM and his staff to implement some policies or procedures to assure that e-mail is utilized. An example might be the submission of consultants' quarterly reports via e-mail. Furthermore, he should continue to monitor its progress (or appoint someone else to do the monitoring) so that problems or glitches that surface can be settled. In this manner, the educational process should be expedited as EES conducts its operations across Eurasia.

6. The questionnaire designed for the 90-day follow-up evaluation should be issued and assessed according to the plan.

7. In June 1994, a convention will be held in Europe for personnel from all 74 seminaries. This would be an ideal time to introduce another workshop on e-mail networking. If all 74 seminaries could eventually participate in the network, the educational agenda would be obviously strengthened.

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APPENDIXES

Appendix A

Procedural Outline

RESEARCH QUESTIONS

In this study, the basic research questions answered were: (a) Which commercial system, technical specifications, and procedures are feasible and available for EES to establish a global network; (b) how successful is a workshop, orientation material, and mentoring when implementing a global network?

PROCEDURES

I. Review the literature Using DIALOG®

- A. search for what seems to be the most relevant criteria
- B. search for existing solutions to implementation
- C. Assess e-mail providers

II. Present director with 12 criteria

- A. investigate up to 20 providers using criteria
- B. base investigation upon direct-contact with candidates

III. Decision-making

- A. present results of procedure 2 to leadership

B. consultation & possible negotiation with provider in light of educational agenda in Eurasia

IV. Assess hardware/software needs & participant anxiety

A. develop a check-list for supporting a credible instrument

B. construct & distribute the questionnaire

V. Conduct a workshop

A. follow extensive preparatory details described in Hildereth

B. convene workshop

C. prepare comprehensive orientation manual

VI. Arrange for Mentoring/Protégé

VII. Level IV evaluation of workshop and mentoring

A. complete participant evaluation

B. change in e-mail usership

1. design questionnaire

2. design usage data analysis

C. value-added analysis

VIII. Intra-organizational LISTSERV

Appendix B

Questionnaire One

NAME: _____

BRIEF QUESTIONNAIRE

In order to increase the chances of successfully implementing e-mail use at EES, the following questions are asked so that appropriate help can be provided:

1. Do you have a modem? [ ] Yes [ ] No

   If yes, describe the model and baud rate if you know it: _____

2. Do you now have an e-mail account? [ ] Yes [ ] No

   If yes, who is the provider and what is your "address"? _____

3. If you have an e-mail account, mark the statement(s) below which describes your feelings about it:

   [ ] I just do not know enough [ ] I am afraid of e-mail [ ] It is frustrating [ ] I think it is valuable
   [ ] I use it without much stress or anxiety

4. Have you ever explored the internet? [ ] Yes [ ] No

5. Before the workshop, how would you describe your interest in using e-mail?

   [ ] Very interested [ ] Unsure [ ] Uninterested

6. Do you subscribe to AEDNET? [ ] Yes [ ] No

   If no, would you be interested in subscribing to this on-line professional journal serving practitioners in the field of adult learning? (currently it is free)?

   [ ] Yes [ ] No

Appendix C

Questionnaire Check-Sheet

The following issues were taken from Boser and Clark (1990), Busche' (1993), De Vaus (1991), Fowler (1991), and Suskie (1992). Each issue was identified and, if appropriate, applied at the time of construction.

1. Are the words simple?
2. Is it under 20 words?
3. Are their any double negatives?
4. Does the question talk down to the respondent?
5. Are there any biases?
6. Is the question hypothetical?
7. Has the question been audited for ambiguity?
8. Does the question contain any idioms?
9. Is there a response item for every conceivable answer?
10. Are all options mutually exclusive?
11. Are the balance of the responses bi-directional?
12. Does the question pass the "so what" test?
13. Does this question pass the "level 9" Gunning For Index?
14. Can the question be shortened?
15. Is this question double-barreled?

16. Is the question negative?

17. Would the respondent likely have the knowledge?

18. Is it completely self-explanatory without a need to read the instructions?

19. Are all response sets truly closed?

20. Are all of the questions in just one form (per section?)

21. Does it appear clear and uncluttered?

22. Are instructions clear?

23. Is the sequence from general to specific; easy to difficult; psychological to logical?

24. Does it have a credible sponsor and a brief justification?

25. Is it grammatically flawless?

26. Are the questions monotonous or pedestrian?

27. Are the questions impersonal, easy, and intriguing?

28. Do the response items exhaust all possibilities or include a neutral category?

29. Are similar items grouped together?

30. Is the reproduction of high quality and with bleeding?

31. Are the instructions formatted differently from the instrument?

Appendix D

Professional Meeting Plan

Part I: An Overview of the Nine Phases:

1. Describe Group History And Analysis
2. Identify Goals/Objectives (Organization & Meeting)
3. The Budget
4. Produce A Meeting Plan
5. Meeting Pattern & Agenda
6. Determine Location
7. Select Site
8. On-Sight Management
9. Post-Meeting Evaluation

PART II: DETAILS ON WORKSHOP DEVELOPMENT

1. **DESCRIBE GROUP HISTORY AND ANALYSIS**

   a. See Chapter 1 of report

   b. See Table 3, Summary Table for Pre-Workshop Questionnaire.

2. **IDENTIFY GOALS/OBJECTIVES OF THE ORGANIZATION AND OF THE MEETING**

   a. For the organization, these are established in Chapter 1 of the report

b. The long-ranged goal behind the meeting is to upgrade the communication procedures among educational consultants at Eurasia Education Services. The manner of upgrade includes the fluent use of electronic mail which can easily link our agency around the globe.

c. The immediate tactical targets are to

(1) chose the most appropriate provider for the consultants

(2) identify the staff hardware and software needs as well as their experience and attitude toward e-mail

(3) to introduce AT&T EasyLink Global networking using five media and to provide a session for discussion and practice for those who are new to this technology

(4) to establish a mentoring arrangement whereby those who are fluent with e-mail can assist neophytes

3. THE BUDGET

	Estimated	Actual
Conference facilities	gratis	0.00
Overhead transparencies	38.95	
Orientation Manuals	175.00	
Misc Copies	100.00	
Video Equipment & Technician	gratis	0.00
Computer Equipment	on-hand	
Projection Panel Rental	gratis	0.00
Refreshments	25.00	
AT&T Easylink Visuals	100.00	100.00
Total:		

The estimated amount was authorized by the Director of Eurasia Educational Services on August 1, 1993.

4. PRODUCE A MEETING PLAN

✓	ACTION OR ITEM TO SECURE	DEADLINE	SECURED	COMMENTS
[ ]	First notice plus letter	Nov 25	Nov 25	Colored copy
[ ]	Room secured	Dec 1	Dec 1	ltr MM/AA; 11/29
[ ]	Projection panel	Dec 1		Rehearsed 3x
[ ]	VCR Equipment/Personnel	Dec 1		AV Dept handled
[ ]	Overhead Projector/bulbs	Dec 1		
[ ]	Phone lines operating	Dec 1		
[ ]	Second notice	Dec 1	Dec 3	
[ ]	Technicians secured	Dec 5		
[ ]	Mentoring chart	Dec 6		Posted on wall
[ ]	questionnaire	Dec 6		
[ ]	Room monitor	Dec 6		Karen Algee
[ ]	Follow-up Chart	Dec 6		
[ ]	Evaluation Forms	Dec 6		
[ ]	Secure key to building	Dec 8		from Tiffany
[ ]	Child-care	Dec 8	Dec 10	Kinder-Care
[ ]	Message Traffic Chart	Dec 8		Posted on wall
[ ]	Convert AT&T visuals	Dec 8		to .ppt; © o.k
[ ]	Computer equip in place	Dec 9		
[ ]	Orientation manuals	Dec 9		editing = delay
[ ]	Arrange tables & seats	Dec 9		
[ ]	Meeting notes	Dec 10		
[ ]	Refreshments	Dec 11		Coffee/cookies
[ ]	Markers (OH & Flip)	Dec 10	Dec 10	
[ ]	Clean up facilities	Dec 14	Dec 14	Alan & Karen

5. MEETING PATTERN & AGENDA *[Critical path]*

I. Introductions

a. People
--Director
--technicians
--guests

b. Comments
--title
--reasons: EES & project

c. Displays
--tables
--powerpoint station

II. Handouts

a. Eavesdropping on professional discussion

b. Questionnaire

III. Present 39 frames; three pauses for discussion

IV. Refreshments

V. Demonstration/Practice

VI. Mentoring Arrangement

VII. Evaluation

6. DETERMINE LOCATION

The conference room of the parent organization (DFM-Eurasia) was secured. While across town from EES itself, four considerations were discussed with the director. These lead to the final sight chosen:

a. room-size

b. central location to all parties

c. parking

d. room designed for the equipment load

7. SELECT SITE

This concern was absorbed by phase six. This phase would become more critical in a longer workshop and where there were much larger numbers of participants.

8. ON-SIGHT MANAGEMENT

Dr. Paul Wood, Director of EES	887-8856 Fax 887-6794
Mr. Alan Algee, Educational Consultant & Workshop Coordinator	883-1314 Fax 883-5792
Mr. Ron Brown, Technical Services Coordinator	862-2781, x2079 fax 869-2441
Mrs. Karen Algee, Workshop Associate	883-1314; fax 883-5792
Tiffany Bowman ECHO Secretary	863-6502 fax 8630-6518
Mr. Mel Snyder, Media Coordinator	862-2781, x1326

9. POST-MEETING EVALUATION

See Chapter Five of practicum report.

Appendix E

Rating Form for Individual Presentations

Presenter's Name:
Topic:
Goal:

Please use the following scale to evaluate this session in questions 1 to 5 that follow:

5 = Very good
4 = Good
3 = Average
2 = Fair
1 = Poor
0 = Not applicable

How well did the session:

_____ 1. Achieve its goal, which is stated above?

_____ 2. Introduce you to new ideas?

_____ 3. Provide relevant information that you can adapt for use back on the job?

_____ 4. Gear the instruction to your level of understanding and expertise?

_____ 5. Adequately provide opportunity for questions and discussion?

6. Additional Comments:

Taken from Simerly (1990). Permission granted to reproduce.

Appendix F

Questionnaire Two

Message-Version: 2
Date: Thu Dec 23 15:18:42 1993
End-of-Header:
Email-Version: 2
UA-Message-ID: <winATT-2.400-aalgee-198>
Phone: 1-417-883-1314
Subject: survey
To: users
End-of-Protocol:
Content-Type: Text
Content-Length: 1878

HI!! I am sending along a couple of documents to you today both by e-mail and s-mail.

First, I have a follow-up survey to see how thoroughly e-mail is being implemented among us and if further help is needed.

If you wish to answer with e-mail, you will need to choose REVISE MESSAGE rather than READ MESSAGE. Then, just send this message right back to me at !aalgee.

If you prefer to answer on the hard copy, you may use the enclosed self-addressed, stamped, envelope.

I am also sending along a list of resources that are available to you. These are easily accessed through your e-mail system. If you like I would be happy to help you proceed with any subscriptions.

Again, thank you for your participation! Alan.

<questionnaire follows; compendium follows as attached file> <eom>

Questionnaire on E-mail Usage

1. How much has e-mail replaced conventional ways you communicate (phone, fax, postage)?

[ ] none at all
[ ] a little
[ ] some
[ ] a lot

2. Which method of communication does e-mail MOST OFTEN replace?

[ ] telephone conversation
[ ] fax
[ ] postage
[ ] other

3. How useful do you think e-mail will be to you within the next 12 months?

[ ] probably not too useful
[ ] perhaps somewhat useful
[ ] very useful
[ ] I am unsure

4. Did you have a "coach" to help you into e-mail usership?

[ ] yes
[ ] no

5. If the above question was "yes", did the "coaching" make a difference in your initiation into e-mail usership?

[ ] yes
[ ] no

6. If you had a "coach", about how many consultations did you have? _____

7. Do you now subscribe to AEDNET or any other electronic resource pertaining to adult education?

[ ] yes
[ ] no

8. What difficulties, if any, are you facing as an e-mail user?

Appendix G

Compendium of Electronic Resources

for Adult/Distance Education

~~~~~~

Dr. E's Eclectic Compendium of Electronic Resources
for Adult/Distance Education
Compiled by J. H. Ellsworth je01@academia.swt.edu

~~~~~~

Updated: 8-December-1993 (C) 1993. This list may be distributed freely without my permission provided that this header and notice are retained intact. Remember, this is a dynamic system, and sometimes lists and addresses change.

This guide is available via FTP at host:
una.hh.lib.umich.edu, path: /inetdirsstacks, file:
disted.ellsworth

~~~~~~

The scholarly discussion lists which are particularly useful adult/distance educators include:

AACIS-L American Association for Collegiate Independent Study
listserv@ecnuxa.bitnet
listserv@bgu.edu
This list is sponsored by The American Association for Collegiate Independent Study with a focus on correspondence, independent study and distance learning.

ADLTED-L Canadian Adult Education Network
listserv@ureginal.bitnet
The Canadian Adult Continuing Education list is a broad world-wide discussion group.

AEDNET Adult Education Network
listserv@alpha.acast.nova.edu
AEDNET is an international electronic network that includes approximately 500 individuals from 415 sites located in 12 countries.

ALTLEARN Alternative Approaches to Learning Discussion
listserv@sjuvm.bitnet
The Alternative Approaches to Learning discussion list is broadly concerned with learning strategies at all levels.
~~~~~~

ASAT-EVA Distance Education Evaluation Group
listserv@unlvm.unl.edu
listserv@unlvm.bitnet
This is the AG-SAT Distance Education Evaluation Group, addressing issues in evaluating all forms of distance learning and programs. It is a broad, practical list sponsored by the Agricultural Satellite Corporation.

CAUCE-L Canadian Association for University Continuing Education
listserv@uregina1.bitnet
listserv@max.cc.uregina.ca
The purpose of CAUCE-L is to provide an electronic forum where issues (broad, narrow, practical, theoretical, controversial or mundane) related to university continuing education are discussed.

CREAD Latin American & Caribbean Distance/Continuing Education
listserv@yorkvm1.bitnet
This is a digest list of distance education information primarily focussed on Latin America and the Caribbean.

DEOS-L International Discussion Forum for Distance Learning
listserv@psuvm.bitnet
American Center for Study of Distance Education sponsors this large, diverse list. Currently there are 1325 subscribers in 48 countries.

DTS-L Dead Teachers Society Discussion List
listserv@iubvm.bitnet
This list is for broad discussions of teaching and learning

EDISTA Educacion a Distancia
listserv@usachuvm1.bitnet
The University Distance Program (UNIDIS) at the University of Santiago sponsors Education at a Distance.

EDNET Education Net
listserv@nic.umass.edu
EDNET is for those interested in exploring the educational potential of the Internet. Discussions range from K-12 through postsecondary education. A very active list.

EDPOLYAN Educational Policy Analysis
listserv@asuacad.bitnet
This list focuses on educational policy analysis. This is an active, broad list, where issues surrounding all levels of education are discussed. This list is more philosophical than many.

EDSTYLE The Learning Styles Theory and Research List
listserv@sjuvm.bitnet
The Learning Styles Theory and Research list discusses all forms of information about learning styles.

HILAT-L Higher Education in Latin America
listserv@bruspvm.bitnet
HILAT-L is a means of interchange about research on Higher Education in Latin America. Postings are mostly in English, but are also welcome in Spanish and Portuguese.

IPCT-L Interpersonal Computing and Technology
listserv@guvm.bitnet
This list is focussed on Computer Mediated Communication, and teaching and learning broadly.

NEWEDU-L New Paradigms in Education List
listserv@uscvm.bitnet
New Paradigms discusses education very broadly, including delivery systems, media, collaborative learning, learning styles and distance education.

POD Professional Organizational Development
listserv@lists.acs.ohio-state.edu
The POD network is aimed at faculty, instructional and organizational development in higher education.

RESODLAA Research SIG of the Open and Distance Learning Association of Australia
listserv@usq.edu.au
This is a discussion list of the Open and Distance Learning Association of Australia's SIG on Research. Its purpose is to foster electronic discussion, symposia
and conferences on topical issues in distance education and open learning research.

STLHE-L Forum for Teaching & Learning in Higher Education
listserv@unbvm1.bitnet
This list focuses on post-secondary education.

TEACHEFT Teaching Effectiveness
listserv@wcu.bitnet
This list treats teaching effectiveness and a broad range of teaching/learning interests.

TESLIT-L Adult Education & Literacy Test Literature
listserv@cunyvm.bitnet
Adult Education and Literacy is a sublist of TESL-L, Teaching English as a second language. Discussions are primarily focussed on issues of literacy and the teaching of English as a second language. Members must also be members of TESL-L.

* *

THERE ARE OTHER LISTS WHICH ARE OF INTEREST TO ADULT/DISTANCE EDUCATORS, BUT ONLY TANGENTIALLY.

DECnews-EDU DECNEWS, monthly e-publication from Digital Equipment for the education and business communities world wide. LISTSERV@ubvm.cc.buffalo.edu or LISTSERV@ubvm.bitnet.

handicap The handicap Digest provides information and discussion on physical and mental handicapped. The articles from the Handicap Digest are also posted in the Usenet Newsgroup, "misc.handicap". Contact: wtm@bunker.shel.isc-br.com

home-ed This mailing list is for the discussion on all aspects of home education. Contact: home-ed-request@think.com.

EDTECH@MSU EDTECH - Educational Technology
EDUTEL@RPITSVM Education and information technologies
EUITLIST@BITNIC Educational Uses of Information Technolog
HEDTEC-L@ALBNYVM1 Technology Impacts on Higher Education
MEDIA-L@BINGVMB Media in Education
SATEDU-L@WCU Satellite Education List

* *

THERE ARE LISTS WHICH DEAL WITH RESEARCH, RESEARCH METHODOLOGIES AND FUNDING SOURCES SUCH AS:

AFAM-L African-American Research
listserv@unbvm1.bitnet
ERL-L Education Research List
listserv@asuacad.bitnet
RESEARCH Reseach funding news
listserv@templevm.bitnet
QUALRS-L Qualitative Research for the Human Sciences
listserv@uga.bitnet
SPSSX-L SPSSX stat program discussion list
listserv@uga.bitnet

~~~~~~~~~~~~~~~~~~~~~~~~

E-JOURNALS OF INTEREST

CATALYST Community Colleges, refereed journal
listserv@vtvm1.bitnet
Electronic version of CATALYST, a refereed print journal for community college educators.

DEOSNEWS The Distance Education Online Symposium
listserv@psuvm.bitnet
The American Center for the Study of Distance Education at The Pennsylvania State University organizes DEOS and publishes The American Journal of Distance Education.

DISTED Journal of Distance Education and Communication listserv@uwavm.bitnet
The Online Journal of Distance Education and Communication covers distance education very broadly, including formal an informal education, geographically disadvantaged learners, k-12 and post secondary.

EDPOLYAR Educational Policy Analysis Archive, refereed
listserv@asuacad.bitnet
EDPOLYAR is an outgrowth of the Edpolyan scholarly discussion list which publishes peer-reviewed articles of between 500 and 1500 lines in length on all aspects of education policy analysis.

EDUPAGE A News Update from EDUCOM
edupage@educom.edu
A newsletter put out by EDUCOM summarizing information technology news. [Subscribe by sending a note to edupage@educom.edu with your name, institutional affiliation and e-mail address.]
~~~~~~~~~~~~~~~~~~~~~~~~

EJCREC Electronic Journal of Communications, refereed La Revue Electronique de Communication
comserve@rpitsvm.bitnet
This is a quarterly bilingual (English and French) journal for the communications field broadly. [The sign up is different for this journal, needing the message join EJREC your_name.]

EUITNEWS Educational Uses of Information Technology
listserv@bitnic.educom.edu
Educom's newsletter for the EUIT program, encompassing distance learning, self-paced instruction, CAI, video and other information technologies for teaching and learning.

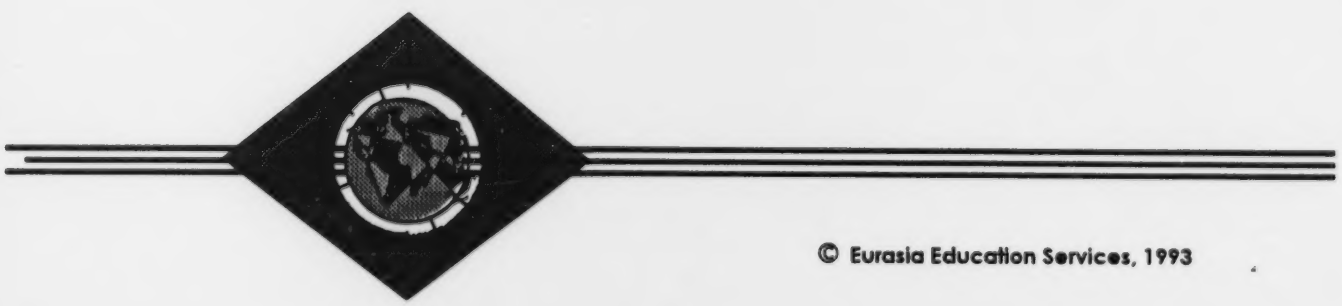
HORIZONS New Horizons in Adult Education, refereed
listserv@alpha.acast.nova.edu
New Horizons in Adult Education is transmitted to educators around the world via the AEDNET discussion list (above). A list of back issues can be accessed by using the index command.

IPCT-J Interpersonal Computing and Technology: An Electronic Journal for the 21st Century

How to Send Smoke Signals On A Rainy Day

A Workshop on

Communication by Electronic Mail



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Part One

Build the Fire

- Learn what is meant by *E-Mail*
- Know the advantages and disadvantages
- Compare the alternatives
- Install a modem
- Open an E-mail account
- Install Software

1. *Learn* what is meant by "E-Mail" . . .

E-mail = the sending & receiving of mail through a modem and phone lines. Depending on the network, you can create, manage, & send using a variety of electronic, facsimile, and paper delivery options.

Brett, G. H. (1992). Navigating the internet: A beginning journal. North Carolina Libraries, 50, 143-146.

D'Souza, P. V. (1992). Electronic mail in academic settings: A multipurpose communications tool. Educational Technology, 32(3), 22-25.

Fleischman, J. (1993, Jan-Feb) Adult education technology in the golden state. Adult Learning, pp.15-16.

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Lynch, D. C. & Rose, M. T. (Eds.). (1993). Internet system handbook. Reading, MA: Addison-Wesley.

Phenix, K. (1992). LITA meets in denver: Opening tollgates to the electronic highway. Wilson Library Bulletin, 67(4), pp.58-60.

Robinson, P. (1993). Delivering electronic mail: Everything you need to know about e-mail. San Mateo, CA: M & T Publishing

Travis, G. R. (1992, Spring). Issues in computerized communication: Components and questions. OAH Magazine of History, pp. 41-48.

2. *Know* the advantages and disadvantages . . .

The Advantages?

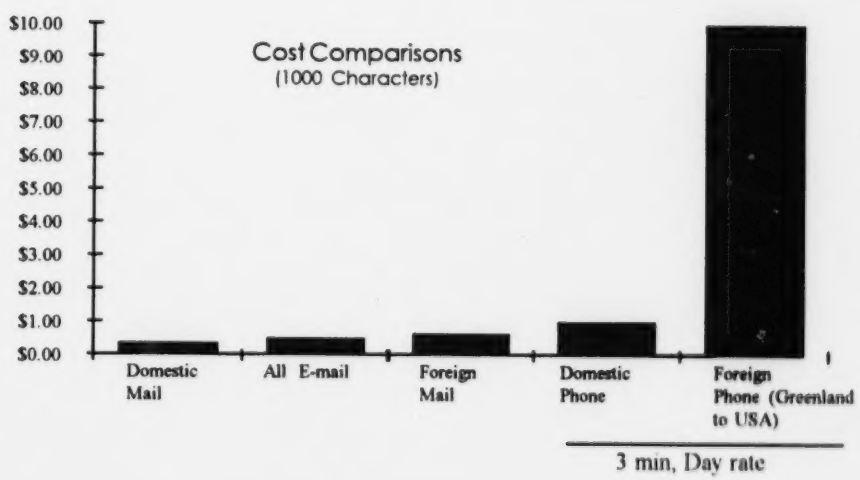
- ❑ Inexpensive
- ❑ Secure
- ❑ Reliable
- ❑ Not bound by place or time
- ❑ Link to various delivery services
- ❑ Receipts (legally sound as certified mail)
- ❑ Broadcasting
- ❑ Bypass traditional steps (envelopes, dialing, etc)
- ❑ Direct phone links not required
- ❑ Best method to send faxes (busy lines, closed lines, etc)
- ❑ Centralized billing
- ❑ All services accessed in same session

The Disadvantages?

- ❑ Requires some knowledge
- ❑ Requires hardware and software
- ❑ If manual logon, must check box!
- ❑ May not accurately reflect your tone or demeanor

3. *Compare* **the alternatives . . .**

	Phone	Fax	E-Mail	Postal
Speed	High	High	Moderate	Low
Synchronized	Yes	No	No	No
Formality	Varies	Moderate	Varies	Varies
Accountability	Low	High	Moderate	High
Conferencing	Small #s	Any to all	Any to all	One way
Dependability Abroad	Moderate	Low	High	High
Security	Moderate	Low	Low	High



4. *Install* a modem . . .

What size?

- ❑ Best if at least 9600 baud
- ❑ If external, power source from computer rather than the wall

What type? You must make a decision:

- ❑ Internal: easier, but hard to switch to another computer
- ❑ External: versatile, but more wires and baggage
- ❑ *This just in*: wireless modem (only in US; Window 2.5; when traveling, saves trying to find a jack

Now what?

- ❑ Install modem according to manual
- ❑ Follow modem manual until you can at least get a dial tone

5. *Open* a network account . . .

Which one?

- ❑ **Recommended: AT&T Easylink, Windows version**
- ❑ **Not recommended: a gateway where your work is on-line (like America Online) unless only way to access from your country**

How?

- ❑ **Call DFM Technical Support; they'll arrange**

6. *Install* your software . . .

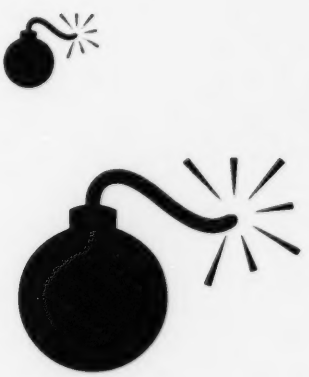
With disks and manuals in hand, follow the manual's chapter on installation

Which steps are critical?

- ❑ **Directories must be consistent**
- ❑ **Access number must be correct for your bps rate**
- ❑ **Sometimes a special logon or hangup string is required**
- ❑ **Password & User ID must be correct**
- ❑ **Try to logon; if there's a glitch, get help from 1) mentor, or 2) DFM-TS, or 3) AT&T-TS**

Raise Some Smoke

- Learn your User's Manual
- Store the access numbers
- Establish connection with network
- Decide what kind of message to send



1. *Learn* **your user's manual . . .**

The manual is an excellent map that can guide you through any procedure; you will learn most procedures quickly and soon you'll not even need to refer to the manual.

2. *Know* **the access numbers . . .**

While INSIDE the USA:

1. Mail access via 9600 modem: 1-800-624-5016
2. Mail access via 2400 modem: 1-800-624-5123
3. For a synthesized voice recording of your mail: 1-800-624-5222 (plus user name and password)
4. For customer service: 1-800-624-5672

While OUTSIDE the USA:

1. Call Customer Service for the access number of the country(ies) in which you will travel or live (1-800-624-5672 or 1-314-770-1608 or !atthelp). KEEP THIS NUMBER!
2. If no local number access number, use 1-314-770-3800 (2400 modem) or 1-314-770-3807 (9600 modem). [You'll have to call the USA to logon. This could erode our usage of AT&T e-mail if , for example, you are in rural Russia. However, a local access number could be made available sometime soon.

3. *Establish* connection with the network . . .

With what?

- Use a jack [regular phone plug], OR
- Use a coupler [a device to strap over the hand set]
- Use aligator clips to actual wires

How do I connect?

- Manually: dial LOCAL access number; logon; password; menu
- Automatically: your software can run a "script"

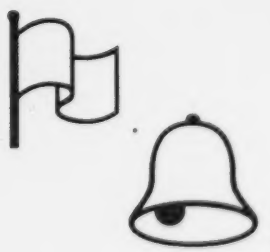
4. *Decide* how you want to send your message . . .

- ❑ To another e-mail address (AT&T or other systems)
- ❑ via first-class mail
- ❑ via overnight mail
- ❑ via special courier
- ❑ via fax
- ❑ via enhanced fax
- ❑ do you want to send a *message* or a *file*?

Part Three

Strengthen Your Signals

- **Follow EES Conventions**
- **Follow Some Suggestions**
- **Observe Netiquette**
- **Read ACRONYMN**
- **Use Auto logon**



1. *Follow* **EES Conventions . . .**

originator's deadline: Thursday, Midnight, GMT

respondant reads by: Monday, Midnight, GMT

This means that

- ❑ **we all agree to check boxes over the 4-day weekend**
- ❑ **we can all anticipate a reply**

2. *Some* **Suggestions . . .**

1. If sending a fax, add /nocoversheet/ saves the receiver a lot of paper.

2. Always use send/receive whenever you logon.

3. Forget costs! But, be efficient with words.

   a. A small paragraph costs about 50 cents. E-mail costs the same per document to send around the corner or around the world.

   b. A message sent via Access Plus/Create requires about 1/5 the cost of a message sent via "enhanced fax". The first is a text file while the second is a graphic file! So, stick to text when you can.

4. International faxes often fail when we do it ourselves. Use AT&T to send faxes internationally. Their nodes are the most sophisticated. Plus, they will stack your message into the node to be sent just as soon as the lines are free.

5. Your mentor is willing to swap e-mail and faxes with you using AT&T in order for you to practice and provide individual coaching as may be warranted.

6. There is an optional feature called "newslink". If one is living in Siberia with no radio, TV, nor newspaper, and you are not sure if you are captive or free, you might be able to at least access the headlines to learn your lot.

7. You can request "receipts" (extra fee) which will tell you if, and when, the receiver got the message. Your receipt will be left in your e-mail box.

8. One of the most valuable feature, I believe, is the laptop to fax capability. With enhanced fax, I have been fully functional on the road.

9. Keep logon protocol in your address book. You never know when you will logon using someone else's computer or another software package altogether.

10. You can call AT&T for a synthesized voice recording of your mail. For example, if Monday morning comes and you cannot get to your computer, you could still a ccess your messages! And keep the covenant!

12. If you are going to be unreachable via e-mail, it's best to let the team know.

3. *Observe* **Netiquette . . .**

Salutations:

Alan, I sent the materials to . . .

Signatures:

Alan Algee
!aalgee
<eof>

1-417-883-1314
Eurasia Educational Services

Abbreviations:

FYI: for you information
EOF: end of file
OTOH: On the other hand

BTW: by the way
IMHO: in my humble opinion

Emotions:

Use caps to SHOUT;
Use * around a word to emphasize

4. *Read* **ACRONYM . . .**

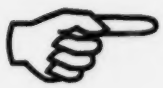
- ❑ **This is a private newsrelease to our EES network**
- ❑ **The EES director can post announcements**
- ❑ **There will be a digest of current events in our professional field.**

Some starter ideas:

EASEL: EurASia Educator's Link

EARL: Europe & Asia Resources Link

5. What's Better Than Door to Door Service?



Automatic logon & address books!

[terminal to terminal service]

- ❑ **Set logon for desired times or intervals**
- ❑ **If you have mail, an icon will appear on screen to alert**
- ❑ **Your mail will be sent & received without your attention**
- ❑ **Address books can be used for single or broadcasting**
- ❑ **Messages can be stored, printed, filed, or deleted**
- ❑ **Reply with a simple mouse click**

Part Four

Afterglow

- **Message Management**
- **Introducing Enhanced Fax**
- **Subscribe to AEDNET**
- **Mentoring**

1. Message Management

With a click, you can . . .

- **Read, print, file, delete, store**
- **Create folders**
- **Copy, move, revise**
- **reply, broadcast, forward, export**

It's best for you to develop your own system of message management. The manual can guide you.

Sample Letter (Out)

Message-Version: 2
Date: Sat Oct 30 08:46:33 1993
End-of-Header:
Email-Version: 2
UA-Message-ID: <winATT-2.400-aalgee-141>
Phone: 1-417-883-1314
Subject: Re: Re: Re: Trends in CE
To: internet!peg.pegasus.oz.au!caeat (Alan Tonkin)
End-of-Protocol:
Content-Type: Text
Content-Length: 100

I would very much like a copy of your 21-page report on the subject of Adult Education in Europe.

Alan Algee
aalgee@attmail.com

This is how it looks at the time it is created. An "envelope" will be added on top of this document by AT&T.

Sample Letter (In)

Message-Version: 2
Date: Fri Oct 29 14:06:32 -0400 1993
From: internet!peg.pegasus.oz.au!caeat (Alan Tonkin)
Message-Service: mail
Received: from internet by attmail; Fri Oct 29 21:46 GMT 1993
Received: by att.att.com; Fri Oct 29 17:40:40 EDT 1993
Received: from alpha.acast.nova.edu by solar.nova.edu (5.61uf1/4.2)
id AA06081; Fri, 29 Oct 93 14:07:00 -0400
Received: by alpha.acast.nova.edu (5.57/smail3.1.27.1/9-8-92)
id AA09357; Fri, 29 Oct 93 14:06:32 -0400
MTS-Message-ID: <internet3022147080>
UA-Content-ID: <internet3022147080>
End-of-Header:
EMail-Version: 2
Sender: internet!alpha.acast.nova.edu!aednet
Subject: Re: Re: Re: Trends in CE
Reply-To: internet!alpha.acast.nova.edu!aednet
UA-Message-ID: <internet3022147080>
Originator: aednet@alpha.acast.nova.edu
To: !aalgee
Message-Id: <436285887@caeat.peg.pegasus.oz.au>
Comment: Adult Education Distribution List
Errors-To: ghorne@alpha.acast.nova.edu
Version: 5.31 -- Copyright (c) 1991, Anastasios Kotsikonas
End-of-Protocol:
Content-Type: text
Content-Length: 3308

This year Robb Mason (CAE) was awarded the Colin Cave Fellowship to -

'investigate the provision of general liberal adult education in 3 European countries at a time of significant social, economic and technological change and to report on the implications for CAE policy and planning. The United Kingdom (UK), the Netherlands (including Dutch-speaking Belgium) and Germany were the countries chosen'.

'Overall the findings can be summarized by saying that while the education of adults in Europe appears to be increasingly dynamic and of growing importance to governments, national and regional, adult education is not. It is having to confront a problem of legitimacy. European governments appear to have understood that adult learning opportunities are vital if their societies are to cope with the rapid economic, technological and social change currently taking place. The education of adults is seen as a lifelong necessity for personal, social and economic well-being. There are considerable resources being deployed in support of programs of vocational education, training and retraining, literacy, numeracy, environmental education and the like. On the other hand the future of government support to a broad range of general liberal adult education programs from which discerning adults can make their own choice is less assured. This is not to say that attendance at such programs is declining for that does not appear to be the case - program attendance is no more of a problem than it is in Australia - but governments appear less willing to maintain funding for such programs at a high level and on an open-ended scale.'

The 21 page report contains -
Adult Education in Europe
Ongoing Liberal General Adult Education
  Cultural Survival
  Historical Embeddedness
  Legislation
  High Quality Cultural Programming
  Political Power
  Political Alliances
A Legitimacy Problem for Adult Education
Legitimising Trends in Adult Education
  Social Cohesion
  Social Competencies
  Maintenance of Democracy
  General Adult Education in the Workplace
The Education of Adults.

If you would like a copy of the report then drop me a line, leaving yoursnail mail address.

+----------+
| AEON BBS | Alan Tonkin | Council of Adult Education | SYSOP | 256 Flinders Street | +61-3-650-2964 | Melbourne, Victoria | [2400.1.N.8.] | AUSTRALIA 3000
+----------+
| Internet. caeat@peg.apc.org | Phone.+61-3-6520656 | Fax.+61-3-6546759
+----------+
| Council of Adult Education Australia's largest provider of adult education and the base for and supporter of the Adult Education Organisation Network (AEON) BBS
+----------+

BEST COPY AVAILABLE

2. What is Enhanced Fax?

If you subscribe, you can . . .

- **Fax directly from any Windows application (with laser quality)**
- **Receive faxes to your e-mail box then read on-screen**

3. Subscribe to AEDNET

Send an e-mail message from AT&T Mail to:
internet!alpha.acast.nova.edu!listserv

Message must say:
subscribe aednet [first name] [last name]

You will receive . . .

- **A journal entitled *New Horizons in Adult Education***
  - **focuses on current ideas & research in adult ed**
  - **is international in scope**
  - **is free! (if recieived electronically)**
- **Discussion by reserachers, practicianers, and students in adult & continuing education of important topics**

4. Mentoring

A two-hour workshop cannot bring a neophyte into e-mail usership. But to assure that this is eventually achieved, a "mentoring" arrangement is provided.

Your mentor can assist you with all phases of e-mail into such time as you are comfortably merged with e-mail traffic.

Protege	Mentor

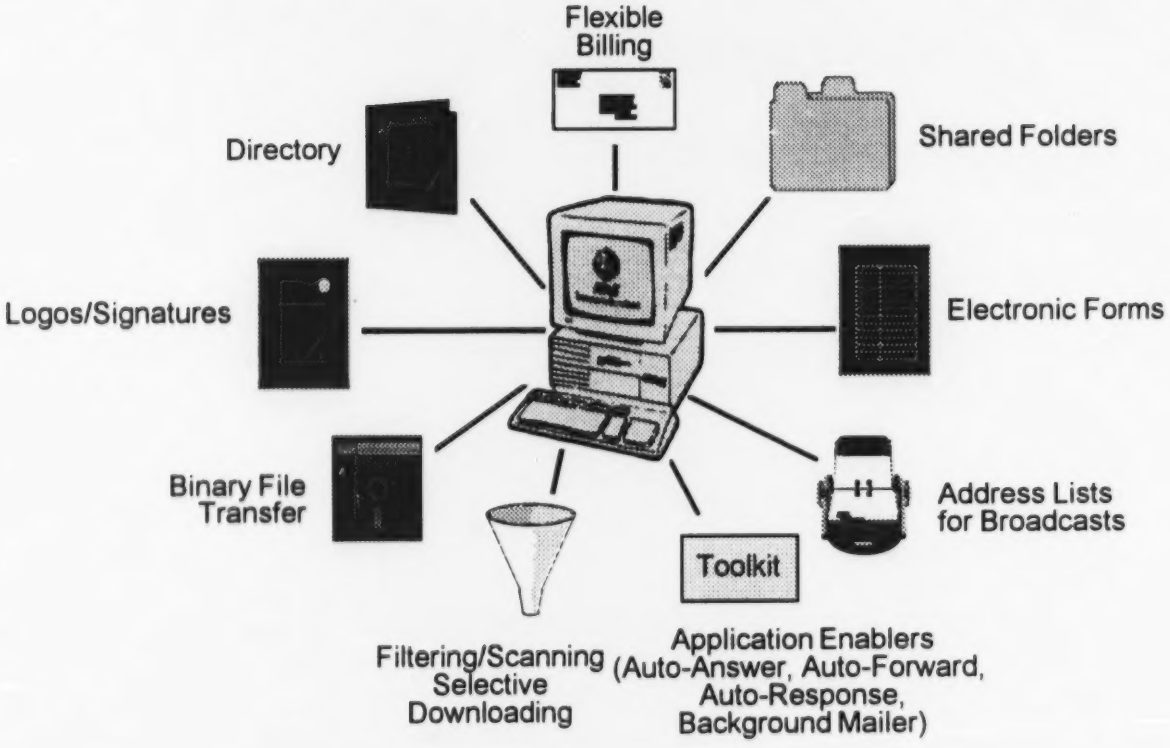
5. Tools not thoroughly covered today

- ❑ Enhanced Fax
- ❑ Internet (FTP & Remote Logon)
- ❑ Viabile alternatives (America Online, etc.)
- ❑ Voice Link
- ❑ EDI
- ❑ Information Services
- ❑ Special connectivity problems
- ❑ Satelite, cellular, wireless

For Your Review

The following frames have been adapted from AT&T presentation materials. They are included here for your review after the workshop.

E-Mail Capabilities



Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce

Changing Office Requirements

- The Challenge... Be More Productive
  - ☺ More Information, Faster Time Frame to Make Decisions
  - ☺ Information Must be Assembled from Many Sources
  - ☺ Shorten the Informational System Cycle Time
  - ☺ Easy Access, Simplified Format for All Information
  - ☺ People are More Expensive than Ever
  - ☺ High Quality Output of All Documents... Fast

Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce

Office Communication Objectives

❖ Determine...

Financial Advantages

- ✓ Head Count Reduction Avoidance
- ✓ Productivity Increases
- ✓ Equipment Displacement
- ✓ Document Distribution Impact

Added Value

- ✓ Document Turn Around Time
- ✓ Responsiveness, Reactiveness
- ✓ Training Standardization

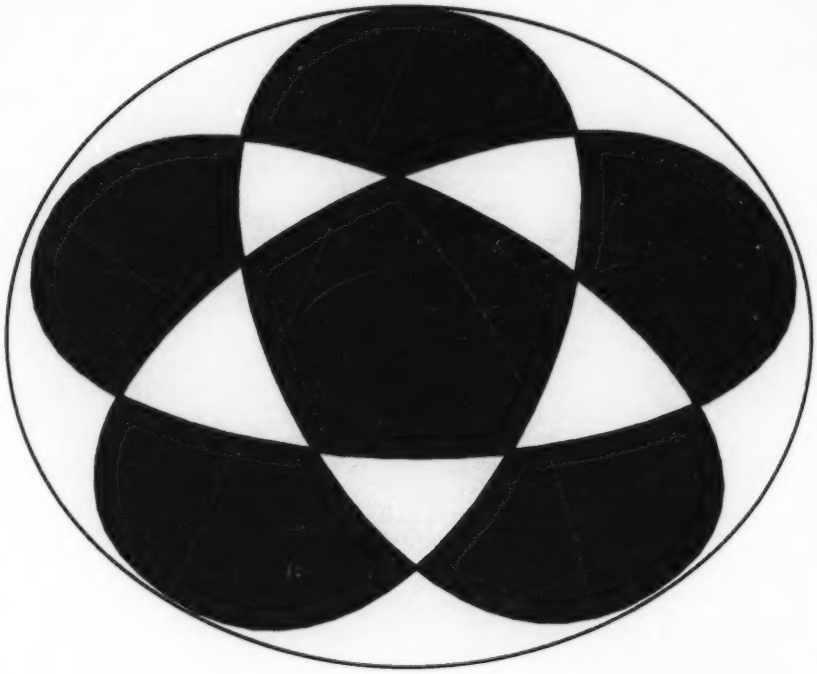
Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce

Benefits of Mobile Messaging

- Provide Mobile Worker With...
  - ✓ Access to Critical Information in a Timely Manner
  - ✓ Information from Anywhere to Anyone
  - ✓ Independence from Traditional Communications Facilities
  - ✓ Efficient and Effective Communications
  - ✓ Productivity Increases
  - ✓ Improved Staff Satisfaction

Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce

A Family of Services



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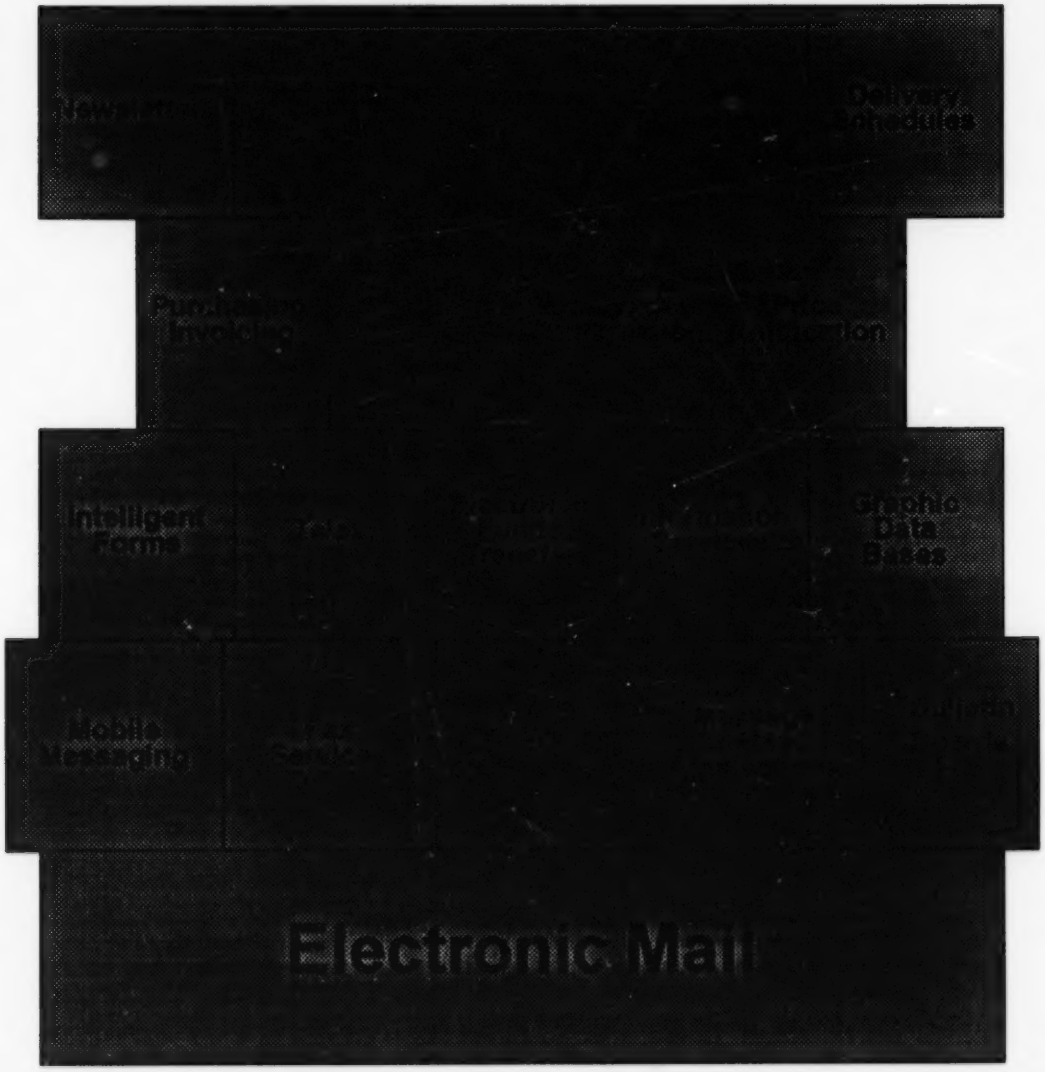
E-Mail Technology Platform



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EasyLink Features...

- Optimal Use of Existing Systems
- Integration with Existing HW/SW
- Maximize Applications Programming Investment
- Transparency to End-Users
- No Hidden Training Costs

Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce

EasyLink Benefits

- Lower Operating Costs
- Improve Profitability
- Increase Productivity
- Expedite Internal Communications
- Enhancement to Private Network
- Investment Protection
- Overcome Time, Distance, Geographic Barriers
- Bridge Inter- & Intra- Corporate Networks
- Expand the Workplace
- Extend the Workday

Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce

Why EasyLink Services?

- ✓ AT&T Legacy of Quality
- ✓ Critical Mass of Global Network Resources
  - ✓ People and Organizations
  - ✓ Products and Services
  - ✓ Financial Investment
- ✓ Quality Approach to Customer Satisfaction
  - ✓ Knowing Your Business
  - ✓ Defining Your Requirements
  - ✓ Establishing a Long-Term Relationship

Taken from AT&T EasyLink Services. Permission granted to adapt and reproduce